

Policy paper July 2023

An industrial strategy for the everyday economy

The CIPD has been championing better work and working lives for over 100 years. It helps organisations thrive by focusing on their people, supporting our economies and societies. It's the professional body for HR, L&D, OD and all people professionals – experts in people, work and change. With almost 160,000 members globally – and a growing community using its research, insights and learning – it gives trusted advice and offers independent thought leadership. It's a leading voice in the call for good work that creates value for everyone.

Acknowledgements

This report was written by Professor Ewart Keep.

Publication information

When citing this report, please use the following citation: Keep, E. (2023) *An industrial strategy for the everyday economy*. London: Chartered Institute of Personnel and Development.

This report is available at cipd.org/uk/knowledge/reports/industrial-strategy

Contents

Introduction	4
Current challenges	5
Recent and current policy thinking and responses	7
The case for the adoption of a broader approach	12
Avenues for policy development	18
References	22

Introduction

The purpose of this paper is to discuss the further development of policy on productivity, growth and industrial strategy. The notion of moving on is important because the UK Government's policy thinking on these issues exhibits a strong tendency to go over the same ground time and again, remaining trapped within the tramlines of a fairly narrow model. The aim here is to provoke debate.

Most of what follows relates to England and decisions by the UK Government. Policies in the devolved nations, particularly Scotland and Wales, reflect divergent policy agendas. For instance, in both those countries a Fair Work agenda has emerged as a public policy priority (Fair Work Commission, 2019; Scottish Government 2022a, 2022b; Senedd, 2022) and is seen as an integral plank in economic development and the delivery of wider social and economic changes. These policy divergencies, and the questions they raise for English policy orthodoxy, remain largely invisible because neither the UK Government nor the media have chosen to pay much attention to what goes on outside England.

At an international level, we face a moment of multiple economic challenges, or what the managing director of the International Monetary Fund (IMF) has termed a 'confluence of calamities' (Roubini, 2023). At UK Government level, the current backdrop is a moment of national crisis, possibly an inflection point in public policy. We are confronted by a raft of major structural problems, with:

- stalled productivity and wage growth
- over the next two years, the largest projected fall in living standards since records began (Office for Budget Responsibility, 2022)
- a wave of industrial unrest
- a fiscal crisis impacting on the public finances
- the evolving effects of the UK's departure from the EU ('Brexit')
- Restrictions to labour supply due to our ageing workforce and changes to immigration policy
- endemically weak business investment
- climate change and the challenges related to achieving the transition to net zero
- the ultimately pervasive effects of digitalisation and automation
- a massive and potentially unsustainable trade deficit
- significant difficulties with cross-government policy coordination.

Given these deep-seated problems, the underlying question is whether economic and industrial strategy is addressing the key issues and doing so in a way that will deliver the desired results. This topic is the central focus of this paper. It will be argued that if the problems outlined above are to be tackled, besides the need to craft and then sustain a long-term strategy, it will be critical to widen the focus of growth and economic development policies to embrace larger swathes of what might be termed the everyday or 'foundational' economy and its workforce, and to think more broadly about the range of interventions deployed to catalyse improved economic performance.

The structure of this report

The structure of the paper is simple. It opens with a review of some of the current economic challenges that an industrial policy needs to address, before moving on to explore current policy thinking and the different models being considered. Discussion then proceeds to making the case for the adoption of a broader model to address the

everyday/foundational economy and embrace new forms of intervention that aim to influence the business environment and what happens inside the workplace. Finally, the paper examines the potential avenues for the development of this wider model and its implementation.

Current challenges

Productivity growth and wages have flatlined

Currently, the central challenge for any economic or industrial strategy is to address stagnation, stalled productivity growth and the resultant phenomenon of very low or no wage growth for most workers. The UK's persistent underperformance has been laid bare by a major inquiry into the future of the economy and labour market, funded by the Nuffield Foundation and delivered by the Resolution Foundation and the Centre for Economic Performance at the London School of Economics (RF/CEP, 2022).

Its findings highlights:

"On the eve of the financial crisis, GDP per capita in the UK was just 6 per cent lower than in Germany, but this gap had risen to 11 per cent by 2019... This reflects a productivity slowdown far surpassing those seen in similar economies. Labour productivity grew by just 0.4 per cent a year in the UK in the 12 years following the financial crisis, half the rate of the 25 richest OECD countries (0.9 per cent). Having almost caught up with the economies of France and Germany from the 1990s to the mid-2000s, the UK's productivity gap with them has almost tripled since 2008 from

6 per cent to 16 per cent - equivalent to an extra £3,700 in lost output per person."

(RF/CEP, 2022, p8)

"Weak productivity growth has fed directly into flatlining wages and sluggish income growth: real wages grew by an average of 33 per cent a decade from 1970 to 2007, but this fell to below zero in the 2010s. The result is that by 2018, typical household incomes were 16 per cent lower in the UK than in Germany and 9 per cent lower than in France, having been higher in 2007." (RF/CEP, 2022, p8)

"Eight million younger Brits have never worked in an economy that has sustained rising average wages." (RF/CEP, 2022, p13)

Underlying these woes are a number of contributory factors. Some of the most important are:

Large spatial variations in productivity

The UK suffers from large, persistent and in some instances worsening spatial variations in productivity, earnings and wellbeing (Brandily et al, 2022; HM Government, 2022a; McCann, 2020; Zymek and Jones, 2020). The government is committed, via the levellingup agenda, to addressing this, but it is widely acknowledged that inequalities of place are an intractable problem and concrete policy responses are slow to emerge.

Weak investment

The UK's long-term record on investment is extremely poor (Productivity Commission, 2022). The Resolution Foundation/Centre for Economic Performance report notes:

"...when it comes to low business investment, the UK is in a league of its own... In the 40 years to 2019, total fixed investment in the UK averaged 19 per cent of GDP, the lowest in the G7 and some 4 percentage points below G7 average of 23 per cent. Persistent low investment means that virtually all of the productivity gap with France is explained by French workers having more capital to work with." (RF/CEP, 2022, p116)

Within total fixed investment, the proportion accounted for by private rather than state investment is particularly worrying, with private business investment representing only 10% of GDP in 2019, significantly behind an average of 13% in France, Germany and the USA (RF/CEP, 2022, p16). For an overview of our deficiencies in investment across different factors of production, see Oliveira-Cunha et al (2021); for a review of employer investment in skills, see Wright and Corney (2023); and for our unimpressive comparative record on private sector investment in research and development (R&D), see Jones (2022). We do appear to score well internationally on investment in intangibles, being ranked fourth globally on figures from 2021 (Brown et al, 2022), but a larger proportion of this investment than in most other countries tends to be in brand equity, firm-specific human capital and organisational capital, with weak investment in R&D and in plant and equipment (OECD, 2011).

Our generally poor investment record is reflected in aspects critical to workplace productivity. Research by the Trades Union Congress (TUC) showed that in terms of investment in ICT equipment, the UK ranked 19th out of 24 OECD nations (Tily, 2018). For example, the UK's uptake of some forms of digital technology, such as industrial robots, has been slow compared with that seen in other countries. Between 1993 and 2017, UK installation of robots occurred at a lower rate than in France, Germany, Switzerland, Italy or the USA, to the extent that by 2017 Germany had five industrial robots per 1,000 workers, while the UK had just 0.5 (for details, see Di Giacomo and Lerch, 2022).

The quality of management, work organisation, job quality and employee relations is patchy and sometimes weak

We have a problem with management in the UK (Haldane, 2018). While our leading-edge firms are world class, we have a 'long tail' of companies whose management is poor and sometimes trapped in a kind of path dependency that makes it hard for them to change and improve (Keep et al, 2006). As a consequence, organisations have limited absorptive capacity (Cohen and Levinthal, 1990; Griffith et al, 2003) - that is, the willingness and ability to adopt and productively deploy new developments, such as innovation springing from scientific advances, updated management practices or a better-skilled workforce. The scale of the problem of a lack of absorptive capacity should not be underestimated (see McCann (2020) and Royal Society (2022) for data on the problem at local and regional levels). For example, we know that if firms do not themselves undertake R&D, their ability to absorb ideas from the outside is weak (Lundvall, 1992), and UK R&D is heavily concentrated in a much smaller proportion of firms than is the case in other countries (Haldane, 2018; ISC, 2021). There is also evidence that the forms of work organisation and job design prevalent in many UK organisations often make poor use of higher levels of skill and do not foster workplace innovation (see Keep, 2016).

The combination of all the factors covered above has helped lead to the productivity and wage growth stagnation with which this section opened. Addressing these weaknesses is critical to making progress, and we now turn to look at policy thinking and responses.

Recent and current policy thinking and responses

Overview of policy thinking

Current conceptions of industrial and broader growth policies demonstrate a fundamental cleavage that spans the political divide between the Conservatives and Labour, with elements in both major political parties subscribing to two different models of the way forward. The first and generally dominant traditional strand of thought or model has been with us for many years, albeit labelled in different ways (growth strategy, industrial strategy, etc) and with continual ideological battles about the dangers of 'picking winners' and the relative focus on horizontal and vertical elements in policy (HM Government, 2022b; Keep and Mayhew, 2014; Reeves, 2018; Willmott, 2021). It is primarily based on attracting foreign direct investment, supply-side reforms (eg upskilling the workforce and public investment in science), and large cities and growth founded upon high-tech sectors and science-based innovation. For examples, see BEIS (2021), Centre for Cities (2020), the Labour Party's Commission on the UK's Future (2022), Resolution Foundation/Centre for Economic Performance (2021), Sunak (2023), as well as Andy Burnham's 'Atom Valley' plan (Elliott, 2023).

One distinctive aspect of this model that needs to be underlined is its longstanding conceptualisation of the workplace and the productive process as a 'black box'. There was a time (the 1950s, 1960s and 1970s) when UK policy on productivity and growth focused on issues such as workplace organisation, employee relations and management (Keep, 2013; Keep et al, 2010; Keep and Mayhew, 2014). However, the rise of policies based on insights from economics, coupled with the decline of the influence of industrial relations and work psychology, and the parallel diminution in the power of trade unions within the workplace, had two effects. The first was a belief that the problem had been solved, as a narrative around trade union decline and a Thatcherite 'productivity miracle' was advanced (Keep et al, 2010). The second was that policy interest in the workplace as a productive unit dwindled as policy-makers came to see the role of government as being to improve the volume and quality of inputs (eg skills, qualifications, R&D) into a sealed unit, with the expectation that this would lead to more and better outputs and a productivity gain (Keep, 2002, 2013; Keep et al, 2006). Government intervention in what happened inside the 'black box' was not seen as legitimate or necessary. This has been dubbed an 'outside-in' model (Keep, 2013).

As a gap between this simple input/output model and real-world performance became noticeable, attention turned to the large residuum of performance that could not be explained by recourse to physical, human and intellectual capital inputs. One of the resulting concepts was total factor productivity (TFP; see Hulten, 2001) and this has come to revolve in large measure around the idea that the adoption of certain management practices, applied in 'bundles' to achieve maximum effect, is key to improving TFP (Bloom et al, 2012). The problem for policy-makers has been how to encourage or enable the spread of these practices in UK firms, who on most measures do not appear to have high levels of the adoption of such practices (Grimshaw and Miozza, 2021; Keep, 2016).

The overall result of the move away from a concerted focus on the workplace and what goes on within it is, as will be explored below, that the bulk of interventions focus on supply-side reforms and the injection of yet more skills and R&D, and the encouragement of higher investment in plant and equipment. Relatively little thought is given to how well these 'ingredients' are then mixed and deployed to productive effect, and such issues occupy the margins of policy development at UK Government level (Grimshaw and Miozza, 2021). This is in marked contrast with practice in many other developed countries, where there exist extensive business and innovation support infrastructure and schemes (see Keep, 2016; Stone, 2011), as well as industrial relations systems, social partnership arrangements, and labour standards that are properly enforced to help close off the ability of firms to rely on a low-wage, low-productivity model to compete.

The second and more recent UK model of industrial and growth policy advocates a broader approach to industrial strategy that encompasses the main elements of the first model but augments them with wider attempts to upgrade productivity across a much broader swathe of employment and economic activity than just high-tech sectors. In other words, it tries to reconnect policy with the workplace and what happens within it, and addresses the 'everyday economy' wherein much employment is located (Reeves, 2018). This it does via conceptions of workplace innovation that in some instances highlight the need to catalyse change through business support and improvement services. It also shades into thinking about the need to promote better job quality and good/fair work (Capgemini Research Institute, 2022; Cruddas, 2021; Institute for the Future of Work, 2021; Reeves, 2018; Rodrik, 2022). We will look at both models in greater detail below.

The dominant policy orthodoxy

It has been argued (Driffield et al, 2021, p1) that "there are only three ways of improving firm level productivity in a given environment... to encourage and facilitate the growth of new high productivity firms, to encourage productivity growth in existing firms, and to attract inward investment". In essence, the policy orthodoxy since the 1980s has been to focus considerable attention and resources on the first and the third of these methods, albeit often in a siloed and uncoordinated way that Driffield and colleagues argue is liable to be suboptimal in its effects. There has been relatively little focus on encouraging productivity growth in any shape or form.

Certainly at present there is a strong faith in a science-led innovation strategy, supported by increased public funding for research and knowledge transfer between universities and industry (BEIS, 2021). The current overall aim is to make the UK a 'science superpower' for insightful commentaries on this goal, see House of Lords Science and Technology Committee (2022) and Jones (2022).

The result is a linear, top-down, cutting-edge, science-driven model. In essence, government and its advisers have conceived of innovation as being driven by university science departments, technological advances, patents and intellectual capital, and by technology and knowledge-transfer systems and processes (Warhurst and Wright, 2014).

This model is by no means confined to the current government. The Labour Party's Commission on the UK's Future (2022) displays a strong continuity with the New Labour governments' enthusiasm for the concept of a knowledge-driven economy (O'Donovan, 2022). The commission's prescription for economic prosperity and levelling up is focused on new industries, 'new economy firms', and high-value, high-tech clusters across the country, with claims that the Centre for Cities has identified 90,000 new economy firms in nearly 50 new industries, while the Centre for Progressive Policy (2020) has identified a

set of emerging new industry clusters around many UK towns and cities, which can form the basis for a science-led industrial revival (Norman, 2020). These new industries include artificial intelligence, genetics, additive manufacturing and 3D printing, clean technology and power, and the creative sector. The intended result is:

"The New Britain that we envisage will nurture the hundreds of emerging clusters of new industries based on new digital, genetic and green technologies that are already growing across the UK. It will ensure all of our towns, cities regions and nations have the power to support, participate in and benefit from the industries of the future creating highly skilled new jobs. And by doing this, we can bring real prosperity and life back to our high streets and town centres, and give young people the opportunities to fulfil all of their potential." Labour Party Commission on the UK's Future (2022, p53)

The stated assumption is that a focus on high-tech clusters and new industries can bring a general economic revival and have impacts on the 'everyday economy' as well, delivering:

- more high-skill jobs capable of paying high wages through higher productivity giving workers and families greater security and a better life
- a lower cost of living, as cheaper energy and more efficient operating models bring down the cost of life's essentials
- a stronger high street as wealth created in new industries is spent locally across Britain, and in this way the 'everyday economy' can benefit from new technologies invented for the new economy
- a more diverse and successful consumer economy, as British people gain access to the latest developments in entertainment, leisure and retail services.

There is little here that would not be familiar to the current government and its advisers.

For the latest version of this approach to science and innovation, the recent report coauthored by Tony Blair and William Hague (Blair et al, 2023) provides a radical and extremely ambitious prospectus. It calls for a 'strategic state' to embrace the technological revolution, remodel and digitise government, and foster scientific innovation on a massive scale.

There is not sufficient space here to review the other institutional and policy initiatives that have made up the UK Government's recent approach to growth and industrial strategy, but at a general level it has led to supply-side reforms aiming, to varying degrees and at different points in time, to:

- increase the stock of skills/qualifications in the workforce and the responsiveness of the skills system/marketplace to employer demand
- increase publicly funded R&D and innovation
- increase private investment in R&D, for example via tax credits
- promote knowledge transfer and technology diffusion
- increase investment in infrastructure (broadband, transport links, etc)
- promote the establishment and expansion of high-tech sectors and industrial clusters in pursuit of the creation of a high-skills ecosystem (Finegold, 1999)

- promote economic growth in large urban conurbations (based on agglomeration theories) and attempt to level up their productivity and gross value added (GVA) to close some of the gap with London
- increase competition to help drive productivity enhancement.

Alternative viewpoints and approaches

Existing alongside, albeit often in the shadow of, the kinds of policies outlined above have been attempts to address an alternative analysis of some of the causes of weak economic performance. This thinking, which is discussed in more detail below, has focused on: deficiencies in workplace management; industries, sectors and localities plagued by low pay and casualisation; poor work organisation and skills usage; and competitive and product market strategies that take a 'low road' approach. Thus, in contrast to the policy model discussed above, these initiatives have been less focused on high-tech, science-based activity and employment, and more concerned with what might be termed the 'everyday economy' (sometimes also termed the foundational economy - Bentham et al, 2013; Schafan et al, 2020). In many localities, this is where a significant proportion of the workforce is employed (Reeves, 2018). A focus on the everyday economy already forms an important strand in Welsh Government thinking, with the government noting that: "In some parts of Wales this basic 'foundational economy' is the economy" (Business Wales, 2022, p1).

In terms of a definition of the everyday or foundational economy, the following offers a starting point:

"We need to broaden our conception of industrial strategy and include the foundational economy and the everyday life of work and the family household. Industrial policy to date has had little to say about this everyday economy. It is made up of the services, production, consumption and social goods that sustain our daily lives. Its core activities include transport, childcare and adult care, health, education, utilities, social benefits and the low wage sectors of hospitality, retail, food processing and distribution. This core employs around 40% of the workforce in England and Wales. Everyone in both our cities and regions, regardless of income, participates in the everyday economy. It is made up of the private, public, and social sectors and is distributed across the whole country."

(Reeves et al, 2019, pp3-4)

However, as is so often the case with policy ideas, there is debate about where the precise boundaries of the everyday or foundational economy lie (see ap Gwilym, 2019).

A key point is that much of this foundational/everyday economy is non-tradeable (Rice and Venables, 2022) - that is, it is not open to international competition. As a result, low levels of productivity and innovation may be sustainable unless other factors intervene.

In terms of policy responses in England, there are essentially two categories. The first has come from the UK Government and has been aimed at general forms of business support and improvement, and technology-transfer services, mostly for small and medium-sized enterprises (SMEs). We do not have the space to describe or review these here, but they include the Growth Hubs within Local Economic Partnerships (LEPs), the Help to Grow Management and Help to Grow Digital schemes, the Business Basics Programme and Be the Business (see Phipps et al, 2021; for an overview of their strengths and weaknesses, see

Willmott, 2021; CIPD, 2021). The key problem is that these are often small-scale offerings that barely scratch at the surface of the UK's problems with management quality and effectiveness. Additionally, there are questions about the suitability and cost-effectiveness of some of the models of management development on which these offerings are based (CIPD, 2021) - which we also lack the space to discuss here.

The second category has been activity-initiated, paid for and delivered by actors outside national government - charities (notably the Joseph Rowntree Foundation), government agencies with non-central government funding (eg Acas), professional bodies (CIPD), and local authorities (regional development agencies (RDAs) and subsequently mayoral combined authorities).

Some of the more innovative interventions are or have been:

- Scottish Skill Utilisation Projects (see Payne, 2011).
- The Acas employee engagement projects: These offered 10 organisations in-depth support to help them change working practices and employee engagement to increase business performance. Most of the projects encompassed an element of what might be broadly defined as workplace innovation. The pilot projects were paid for by the now-defunct East Midlands RDA, delivered by Acas and the UK Work Organisation Network (UKWON), and evaluated by Nottingham Trent Business School (see Harris et al, 2011; Totterdill, 2019).
- The CIPD, funded by the J P Morgan Foundation, piloted a set of local business support initiatives that offered a limited amount of free 'pump priming' HR consultancy support to small and medium-sized businesses to improve their personnel management and development practices and productivity (for an evaluation, see Atkinson et al, 2017).
- A number of mayoral combined authorities (MCAs) notably Greater Manchester and Leeds City Region - have sought to address the problem of low-pay sectors. Some of this activity has focused on trying to get employers to sign up to voluntary good work/employment charters, while other elements have centred on a package of interventions linking skills to promoting different pathways for in-work progression (see Sissons, 2020). However, as Yates et al (2021) argue, the success of such ventures has been limited as employment in low-pay, low-productivity sectors has continued to grow. Evidence to date suggests that such initiatives take time to gain traction and require effective marketing and business support services to boost uptake and impact beyond the small numbers of 'good' employers that are typically attracted to these schemes (CIPD, 2020).

Overview

Although this activity by government and other stakeholders has produced valuable insights and tested out what is possible (Henley, 2022; Phipps et al, 2021), the overall pattern of weakness in these initiatives is clear. Most have been or are small scale, supported through local competitions for pots of time-limited government funding, and often tied to institutions that have themselves been undergoing change - or in some cases outright abolition. The ephemeral, peripheral and transitory nature of these projects could be argued to reflect their marginality to the overall thrust of policy, and despite the lessons generated by these experiments, they have not yet entered the current UK Government's economic development policy consciousness or the practices it generates. That said, the recent Labour Party Industrial Strategy (2023), in marked contrast to the party's Commission on the UK's Future report (2022), attempts to meld the two models of economic development together, with, for example, a promise to address problems in the everyday economy spearheaded by a pilot project in the social care sector. The announcement of such a strategy prompts the question of where policy goes next.

The case for the adoption of a broader approach

As outlined above, there are two models of what an industrial or growth strategy might contain. Plainly, they do not have to be mutually exclusive. The key issue for policy is what emphasis to place on each. The first model supports interventions that are liable to be critical to the nation's global competitiveness and technological capabilities, and mirrors common elements in the industrial strategies of nearly all developed countries. However, it can be argued that while such an approach is necessary, on its own it is insufficient.

The government's *A plan for growth* (HM Government, 2022b) majors on traditional policies such as investment in R&D, infrastructure and more skills - all areas that have been pursued with some but ultimately limited success over the past 30 years. Private sector investment in innovation, outside of a handful of sectors (eg aerospace and pharma) is patchy and weak, and our infrastructure is creaking and certainly needs improvement. Although we have spent a great deal of time and energy obsessing about a 'skill revolution', the overall story is that enhancements in human capital (mainly paid for through public spending) have not had the anticipated scale of impact on productivity and have been attended by evidence of overqualification and poor utilisation of skills within the workplace (Grimshaw and Miozza, 2021; Keep et al, 2006). Data suggests that demand for skills within the economy is more limited than policy has assumed (Keep, 2016; Keep et al, 2006; Lyons et al, 2020; Grimshaw and Miozza, 2021), and there is evidence that in a significant number of organisations, the utilisation of the workforce's skills within the productive process is suboptimal (Keep, 2016), a situation that reflects their limited capacity to absorb new technologies or more skilled workers.

In addition, there is evidence that some firms, sectors and localities may be trapped in a more general low-skill equilibrium (LSE) that can be difficult to escape. Many businesses have learned to live with a low-pay, low-skills and low-productivity model and to make it work, at least in terms of delivering profitability (Green et al, 2018; Lloyd et al, 2008). The LSE phenomenon is a large and complex topic that cannot be dealt with in any detail here, but it is important to note that there is evidence for the existence of these 'low-skills traps' in some UK sectors and localities (see Hodgson and Spours, 2013; Seaford et al, 2020; Sissons, 2020; Wilson and Hogarth, 2003).

As a result, it is unclear how further attempts at pursuing traditional policies with limited reach and impact across the economy at large can, on their own, bring about the general transformation in productivity growth that is essential. Thus the key question is whether we should consider expanding and mainstreaming a broader approach to industrial strategy. This would mean promoting:

- 1 a broader focus on productivity enhancement to cover everyday jobs and sectors
- 2 a broader conception of innovation (workplace innovation)
- 3 a concern with promoting job quality and good/fair work

4 the development of integrated packages of business support and improvement to enable better management and employment practices, and create more 'space' and demand for workplace innovation and skills.

The case for this change in policy orientation is explored below. It argues that current policy approaches are necessary but insufficient unless broadened, and that there are a number of problems that will need to be addressed, including low productivity, low pay, poor job quality, weak people management and limited levels of innovation.

The case for addressing the everyday economy

Why is a broader focus that embraces medium- and low-tech sectors important? The first point is that for both the UK, as a whole relative to our overseas competitors, and for some English regions relative to London and the southeast, there is a need for policy to address performance improvement on levels of productivity per hour worked across the entire economy.

Simply having islands of high-tech productivity surrounded by a sea of mediocre performance in the rest of the economy is a recipe for overall failure.

Lord Heseltine, in his *No Stone Unturned* report on local economic development (2012), argued:

"It is tempting to focus on a few select, top-end sectors and on high growth companies. The fashion changes, but at the moment it is high tech and exports to new markets that are paraded as the easy solutions. They are important, but ultimately they are not enough to ensure a broad-based competitive economy. We cannot ignore the performance and growth potential of the mass of businesses across all sectors including construction, logistics, retail, hospitality and health and social care, which have traditionally provided a high proportion of the employment opportunities in this country." (Heseltine, 2012, p125, para 5.15)

However successful the kinds of science-focused plans contained in the government's innovation strategy, the Chancellor of the Exchequer's recent four-point plan (Hunt, 2023), or the Labour Party's Commission on the UK's Future paper (2022), the reality is that the overall structure of employment in the UK will change quite slowly and a considerable volume of work in relatively mundane sectors and occupations will persist. The much-vaunted and oft-heralded knowledge economy that has obsessed many policy-makers in successive Labour and Conservative governments (O'Donovan, 2022; Pabst, 2023) remains a long way off. The number of highly qualified knowledge workers is growing, but this does not mean that lower-skilled and lower-paid employment is set to vanish in the foreseeable future as some policy-makers have appeared to hope. Indeed, there is good evidence that overqualification is an increasing problem, with a growing proportion of UK graduates entering and remaining in relatively low-skilled jobs where graduate-level qualifications are not needed (CIPD, 2022).

The *Working Futures* studies, which have been conducted for a considerable period, form the core of official forecasts of future employment and skill needs across the UK. The latest study (Wilson et al, 2020; see also Wilson et al, 2022) confirms a picture of slow change. For example, it projects that the 26.3% of total UK employment accounted for by wholesale, retail, motor vehicle repair, transport and storage, and accommodation and

food activities in 2017 will have fallen by less than half a percentage point to 25.9% by 2027.

Thus, as Thompson and colleagues (2016) and O'Donovan (2022) argue, now and in the future, low-wage industries such as wholesale, retail, accommodation and food services will continue to account for a significant element of our productivity gap with other developed countries. Existing industries and occupations will not simply vanish because new industries arrive (as the *Working Futures* report clearly demonstrates). No matter how many quantum computing or life sciences firms spring up, there will still need to be shops, care homes, hospitals, street cleaners, bin lorries, road menders, electricians, plumbers, pubs, restaurants, cafés, and so on, and the productivity and pay of those who continue to work in these areas of economic activity will help determine our overall national performance and wellbeing. In many ways we seem to be in danger of forgetting the revelation occasioned by the COVID lockdowns - that society functions because of key workers, many of whom are not knowledge workers (at least in the way that that phrase is usually defined and used).

Thus, while there is much to support in the vision of fostering new industries across the UK, the problem comes with the belief that this will, in and of itself, somehow be sufficient to galvanise economic performance and prosperity across the rest of the economy. Current evidence suggests that policies based on 'trickle down' (from higher-wage sectors to lower-wage ones) and 'trickle across' (from higher- wage and better-performing localities to adjacent spatial units) are, at best, a long, slow haul. For example, there are often massive and stubbornly persistent differences in productivity and earnings within spatial units as small as mayoral combined authorities (Coyle et al, 2019; HM Government, 2022a; Zymek and Jones, 2020) and there are few if any signs that these gaps are being closed.

A reliance on high-tech sectors and clusters comes with the danger that what forms is a 'tech bubble' focused on a relatively limited space/place existing more or less in isolation from the wider local economy and labour market (Wessner and Howell, 2017; see also Lloyd Goodwin and Millthorne, 2023, for a critique of Greater Manchester's 'Atom Valley' strategy). Thus, attempts to attract advanced manufacturing and high-tech digital industries, while important, are not a panacea and they may not work in locations that lack a supportive infrastructure. Moreover, as Lee and Clarke (2017) demonstrated, while these sectors directly create some high-skill, high-wage employment, they also support the creation of relatively low-wage work in local non-tradeable services (like childcare, retail, hospitality and domestic services) and therefore in and of themselves will not solve problems of low pay in a locality. Lee and Clarke argued that this:

"...does not mean that advanced industries reduce living standards for people on low wages but it does act as a reminder that the expansion of such industries will not solve the UK's low pay problem. A modern industrial strategy must be able to take in both these advanced industries and help to raise productivity in non-tradeable sectors. A failure to focus on industries like retail and hospitality that are low paying but employ much of the population is likely to mean a failure to narrow regional divides or boost living standards." (Lee and Clarke, 2017, p6)

This issue was identified as long ago as 1999, in Finegold's seminal article on the creation of California's high-skill ecosystem.

To give one example, the author of this paper is a member of the Oxfordshire Local Enterprise Partnership's Skills Board, and can report that although Oxfordshire is an integral and very successful part of the UK's 'Golden Triangle' (London, Oxford and Cambridge) of high-value innovation with clusters in quantum computing, the space industry and life sciences, there is limited evidence of either trickle-down or trickle-across effects in terms of the productivity of other local sectors or the earnings levels of those who live in poorer areas of the county, such as parts of Bicester and Blackbird Leys. The danger in a high-tech, 'high-end' focus is people, places, occupations and social classes that are currently 'left behind' will remain so unless we can ally a science-based innovation policy with a complementary set of policies around workplace innovation and business improvement in 'everyday' localities, sectors and workplaces. Until we can transform productivity across the economy, the chances are that we will continue to languish in international league tables of hourly labour productivity, and consequentially we will not be able to afford real-terms wage increases for a large proportion of the working population.

The case for a wider model of innovation

A related set of problems centres on the ability of science-led industries to improve the performance of non-science/tech sectors within the economy. Current policy assumes that higher wages and productivity in non-high-tech sectors and the localities that support them will be promoted by technological spillover effects (the wider adoption of new technologies, such as automation and AI) and that higher wages in these science-based sectors will revitalise the wider local economy (Labour Party Commission on the UK's Future, 2022).

Unfortunately, the number of people that high-tech sectors and firms directly employ tends to be low, especially when compared with mass-service companies (Crouch et al, 1999). For example, in 2021 Microsoft's worldwide workforce stood at 181,000, while Walmart's was 2.3 million. In addition, as previously noted, tech firms tend to operate in geographical clusters, and in the UK, many, although by no means all, of these are concentrated within the Golden Triangle (Jones, 2022). If the revival of the economic fortune and productivity growth trends in parts of 'left behind' Britain is an important goal, any strategy relying on science-based high-tech sectors may be in for a long, hard slog, not least as it requires a spatial rebalancing of R&D investment, which will not happen overnight (BEIS, 2021; Enekel, 2020; Fanning and Marlow, 2022). Even a research-intensive university does not guarantee substantial effects on economic performance in its locality (Enekel, 2020).

It is also the case that high-tech innovation, even allowing for spillover effects, will often not directly transform the productivity of other, non-related sectors in the locality. For instance, quantum computing manufacture, however important the technology and however productive its workforce, may not have much immediate or medium-term impact on labour productivity in local care homes or distribution hubs.

Perhaps most importantly, traditional science and innovation policies work well for hightech sectors, but it is much less clear that they engage directly with large sections of mass services (ie those parts of the economy where significant volumes of employment are located). The problem with the UK Government's reliance on traditional models of science and innovation to drive economic change is that it is an activity that takes place in only a tiny minority of UK companies - 75% of private R&D spend in the UK takes place in just 400 firms (Haldane, 2018), and of 3 million active UK firms, just 60,000 claim R&D tax credits. The other 98% do not (ISC, 2021, p34). Given that this large residuum accounts for the majority of UK employment and GVA, if innovation policy is to boost productivity and competitiveness among the mass of firms, then innovation support has to be thought of and delivered in wider terms that cover various forms of workplace- and employee-driven innovation (Hoyrup et al, 2012; ISC, 2021).

A second negative consequence of the traditional model of innovation is that it ignores the potential for bottom-up, incremental workplace innovation that can enhance products, services and the means by which they are delivered (Hoyrup et al, 2012). In other words, UK innovation policy is often concerned with the skills and knowledge of only a relatively small, elite segment of the workforce - research scientists, R&D staff, knowledge-transfer experts, and senior organisational and production managers in the companies adopting the technological advances that the innovation process has developed. By contrast, Scandinavian models of innovation engage a much wider set of firms and a much broader section of the workforce (see Keep, 2016) and are centred on workplace change and organisational and employee-driven process and product innovation (see Lundvall et al, 2008; Ramstad, 2009a, 2009b).

This approach starts with the belief that there are two modes of innovation. One is the science, technological and innovation (STI) mode, centred on the production and application of codified scientific knowledge and technologies - in other words, the approach on which the UK's innovation policies are almost exclusively focused. The other is innovation that takes place through doing, using and interacting (the DUI model), and this relies on informal learning and know-how gained through experience (Jensen et al, 2007; Warhurst and Wright, 2014). Thus innovations are not limited to the industrial, scientific and technical - they can also be social or organisational. For example, successful adoption of new technologies often requires adaptation in job structures, skills, organisational and management systems (Ramstad, 2009b). For many firms working in non-high-tech sectors, workplace or bottom-up innovation is often critical to their performance and survival (see Froy, 2013).

Plainly the DUI model can be deployed to complement more traditional top-down models of science-driven innovation. The two are not in any way exclusive, and research shows that organisations able to combine both modes are more likely to develop new products or services than those that rely exclusively on the STI or DUI model alone (Jensen et al, 2007). It is also the case that, whereas the STI model requires national or regional support systems, networks to underpin the DUI model could be organised on a local basis through Chambers of Commerce or bodies such as Local Enterprise Partnerships (LEPs).

The case for a focus on managerial capacity, improving the employment relationship, job quality and fair work

Recent history highlights doubts about the ability and motivation of many organisations to risk attempting radical change to their low-wage, low-skill, and sometimes low-productivity business models (Keep et al, 2006). Over the past 30 years or more, many firms have successfully sustained such strategies, demonstrating that limited productivity and poor workforce remuneration and working conditions do not have to equal weak profitability. Moreover, many managers understand how to make this model 'work'. Organisational change and business improvement, on the other hand, is difficult, as it can be constrained by a lack of internal resources and capacity, as well as the mindset of management teams.

As a result, as the CIPD (2021) has argued, a focus on supporting improvements in managerial capacity and a raising of ambition across the UK economy will be central to any general improvement in productivity and economic wellbeing.

The business improvement organisation Be the Business (2021) argues that there are five interlocking factors that together lead to high-productivity organisations: management and leadership; technology adoption; training, development and human resources policies and practices; operational efficiency; and innovation and ideas. As noted above, policy currently only really targets technology adoption and innovation, and our efforts at supporting businesses to aim higher are limited in scope and ambition. This is in marked contrast to practices in other developed countries and needs to change if a high-productivity economy is our goal.

Besides the quality of management, the quality of employment opportunities in general matters. Job quality is an extremely important component in delivering real growth, prosperity and individual and community wellbeing (Cruddas, 2021; Goodwin et al, 2022; Institute for the Future of Work, 2021; Marmot, 2020). The US academics Rodrik and Sabel (2019, p5) have argued that "producing good jobs is a source of positive externality for society", and is central to helping less successful localities to improve their relative performance and outcomes. They go on to suggest that what is required is a fusion of local business support and improvement services (what are often termed 'extension services' in the USA), economic development, and skills and active labour market programmes adapted to fit local circumstances and needs (see Bartik, 2018; Rodrik, 2022). As Miller-Adams and colleagues observe, "The goal of more and better jobs for residents can best be achieved by making high quality investments in both local skills and business growth, not just one or the other," (2019, p1).

In the UK, there is emerging evidence that job quality and good jobs have a positive effect on productivity (Bosworth and Warhurst, 2022), and the linkages between job quality and mental and physical health have been known for a relatively long time, with Sir Michael Marmot calling, 10 years after his initial review on health equity, for fair employment and good work for all (Marmot, 2020; see also Institute for the Future of Work, 2021). There is also research that suggests that better job quality and flexible employment practices can help enable people with poor health, disabilities and caring responsibilities to enter and sustain employment (eg Roulstone et al, 2003; Yeandle et al, 2002). This suggests that policy-makers interested in welfare to work should increasingly be considering policies and approaches that seem to improve organisations' people management practices and job flexibility. This is particularly the case given the growing evidence that the current 'supply-side' benefits regime tends to drive people into insecure, low-paid and low-quality employment (Hoyes et al, 2022).

The quality of work has varied considerably over time and between different localities (for details, see Judge and Tomlinson, 2022; Papaganniaki et al, 2022, 2023), and the data suggest that some parts of the UK have much poorer-quality employment than others. As a result, the Institute for the Future of Work has called for work-quality improvement to reside at the heart of the levelling-up agenda (Papaganniaki et al, 2022), and the Industrial Strategy Council (ISC) in its final annual report (ISC, 2021) called for the creation of a labour market strategy at UK level to provide a broader context for skills and workplace innovation policies. Unfortunately, as previously noted, the government stance is that the workplace is best treated as a sealed unit, and that, as a platform of minimum legal employment rights is in place, any further role for the state is unnecessary. The

limited response to the Taylor review of working practices (Taylor et al, 2017) speaks volumes about the lack of enthusiasm in Whitehall for any substantive change, and at present, the prospects for the kind of strategy the ISC and others desire would appear extremely limited. However, if the type of labour market and economy to which policy ostensibly aspires is to be delivered, change will have to come (Goodwin et al, 2022; Judge and Tomlinson, 2022).

Employment, productivity, job quality, labour regulation and compliance, skills and business support are best seen as being mutually interdependent.

So, if we want businesses to follow employment law and manage and treat employees better, then there is a need, not just to bolster enforcement by boosting the number of labour inspectors and increasing penalties, but also for a much stronger focus on supporting employer compliance (CIPD, 2020). This suggests a new approach is needed to labour market enforcement that embraces stick and carrot to both improve the protection of employment rights and help raise standards in people management and development.

Avenues for policy development

An agenda for action

The analysis outlined above is not revolutionary. The government's white paper on levelling up (HM Government, 2022a) argued that there is a set of mutually interlocking 'capitals' that act as the drivers for tackling poor economic performance and spatial inequality:

- 1 physical capital (infrastructure, plant and machinery, and housing)
- 2 human capital (the skills, health and experience of the workforce)
- 3 intangible capital (innovation, patents and ideas)
- 4 financial capital
- 5 social capital (the strength of communities, relationships and levels of trust)
- 6 institutional capital (local leadership, capacity and capability).

The government also argued that all of these need to be addressed in the round if progress is to be made, stating: "The engine of regional growth is a six-cylinder one" (HM Government, 2022a, p57).

The foregoing thus suggests the adoption and pursuit of a broader set of policy objectives is required. This would be focused on supplementing existing approaches with a new emphasis on incentives and business improvement/support services that aim to create better-quality management, not least of which people and the employment relationship, more good work and much higher levels of workplace innovation. If this is the goal, what needs to happen next?

The answer is that we will need to establish and implement:

- A broad-based economic development and innovation strategy that encompasses and addresses the bulk of the economy and employment.
- A strategy that is integrated in its conception and delivery across different policy domains/agendas eg skills creation and utilisation, job quality, workplace innovation, digital adoption, exporting, and so on. Efforts on the

ground need to be linked to a strategic vision of the future of work and of productive workplaces.

- A model of policy that accepts a role for enhanced business support and improvement - this means designing and developing an integrated package of diagnostic help, followed up by the growth of support services to aid business improvement and workplace innovation, nested within a broader set of economic development goals.
- An exercise to gather and synthesise lessons from overseas practice, and also from the efforts of the devolved nations on Fair Work and economic development, coupled with a similar exercise covering existing small-scale interventions on job quality, business support and improvement in England. For example, Fair Work policies in Scotland and Wales have demonstrated the leverage that can be achieved via public sector procurement policies and conformity to Fair Work standards as a precondition to various forms of government support for businesses.
- A labour regulation/employment law enforcement regime that is closely coordinated and adequately staffed and resourced unless we close off access to employment practices that undercut labour standards and good employers, improving performance across the board will be extremely difficult. An effective enforcement system can play a role in raising overall employment standards over time, not least through having a much stronger focus on supporting employer compliance and enabling firms to improve their people management capabilities and practices (CIPD, 2020).
- A range of carefully evaluated pilots to test out different approaches at local and sectoral levels given the low base from which we are starting with business support and improvement services, it will take time and 'action research' to arrive at a situation where we know what works and have the means to deliver it at scale (see Rodrik, 2022, for an excellent exposition of why experimentation and the distillation of lessons learned are required to find and fine-tune interventions that deliver the desired results). Metrics to measure progress will also be needed: evaluation of different models and some headline aims to achieve. As noted above, efforts on the ground need to link back to a national vision of what the future of work and effective workplaces should look like.
- A focus on developing coherent employer groupings at local and sectoral levels to enable greater collective action by firms without an effective collective employer voice and capacity to act, government (national and local) will struggle to mobilise a key set of partners (Keep, 2020).
- An approach to economic development that embraces real partnership working for example, between national and local government, and between government and social partners.
- A recognition that this is a long-term project and that it will take time to generate cumulative effects on performance and outcomes.

The final point is particularly important. The problems that need to be addressed are complex and longstanding; they will not be solved overnight. Recent research points to the complexity of the UK's 'productivity problem', and to the heterogeneity of firms and

of the factors that, in combination, enable firms to be more or less productive (Driffield et al, 2021; Forth and Rincon Aznar, 2018; Wilkes, 2021). Moreover, in international terms, some UK low-pay sectors appear to perform relatively well on productivity, while some of our higher-paying sectors have shown signs of a marked productivity slowdown (Forth and Rincon Aznar, 2018). Going beyond productivity, it would be dangerous to assume that poor job quality and employee relations practices are confined to low-pay sectors.

Some have argued that whatever support is provided, a significant number of firms will struggle to raise their productivity to an extent that would generate significant benefits (Brandily et al, 2022), while others have suggested that a broader, long-term approach to business support and improvement can make a difference (Bentham et al, 2013; CIPD, 2021; Goodwin et al, 2022; Wilkes, 2021; Willmott, 2021). This is why evaluation will be important.

Building capacity

Even when industrial policy proposals acknowledge and address the need to upgrade the everyday economy, they are often short on detail about how or by whom this change is to be supported. This is a major weakness. Delivery capacity is critical to change but is in short supply across England. Research on local economic development suggests that capacity, in the shape of agencies, staff, experience and an understanding of what works, is weak, highly fragmented and poorly resourced (Atkinson et al, 2019; Payne, 2018; Romaniuk et al, 2020; Seaford et al, 2020; Yates et al, 2021). As a result, local and sectoral capacity-building will be a key component of policy on business support and improvement services, not least in terms of a local ability to design and deliver programmes of activity competently (Ahrend and Schumann, 2014; Industrial Strategy Council, 2021; Jong et al, 2021; McCann, 2020; Rodrik, 2022). The same is liable to be true of sectorally focused initiatives.

The potential role of different actors

The kind of agenda outlined above can only be delivered through partnerships brokered at national, sectoral and local levels. A central task will be mobilising a coalition of those who want change to happen and those who can facilitate its delivery.

The actors that need to be engaged and concerted include:

- Catapult Centres (including the UK's Connected Places Catapult)
- What Works Centre for Local Economic Growth
- ESRC Productivity Institute
- Civic University Network and the Association of Colleges
- Chambers of Commerce
- sectoral employer bodies
- local authorities, MCAs, LEPs and the Growth Hubs
- existing national business support agencies and organisations, such as Acas and Be the Business
- local further and higher education bodies.

Although existing capacity is patchy and relatively weak, there are organisations whose potential has barely been tapped in a systematic way. For example, the role of universities as engines for innovation and innovation support is widely recognised - that of further education colleges much less so, but they, working alongside local universities, can support the kind of approach advocated in this paper (Civic University

Network/Independent Commission on the College of the Future, 2021). In many of our less prosperous communities and urban areas, the main vocational and post-school education and training provider will be the local further education college (DfE, 2021). This positions them as key actors in identifying local skills needs and organising provision to meet these, and there is good evidence that, within the constraints imposed by current policies and funding regimes, colleges are busy doing this (Nelles and Verinder, 2023). Moreover, colleges also represent an under-recognised resource in delivering business support and improvement, helping local firms to innovate, to upgrade their productivity, be better employers and use skills more productively (Nelles and Verinder, 2023; Nelles et al, 2021).

There will also be a need to develop forms of wider business support to incorporate specialist people management and development advice. Bodies such as Acas and the CIPD have an important role to play in developing this capacity.

Persistence and stability

Finally, it is essential that we see this as a long-term project - a marathon, not a sprint. As the ISC and many others have noted, the tendency for economic development policies and institutions to be regarded as ephemeral and transient has gravely weakened their effectiveness. Persistence and stability really matter.

Given past performance, this is a daunting 'ask' and one that poses a fundamental challenge to a policy formation system that has struggled to craft and then maintain a coherent and credible overarching economic growth strategy (Burnett and Priestly, 2022; House of Commons Treasury Committee, 2022; Norris and Adam, 2017; Westwood et al, 2021). There is also doubt about the capacity of government to 'join up' activity and thinking across different policy areas and silos (Pabst, 2021; Richards et al, 2022), with Richards and colleagues arguing that the UK possesses "an incoherent state" (2022, p2), ill equipped to confront the challenges of the 21st century. It is certainly the case that the question of who in Whitehall owns the problems of economic development, growth, productivity and job quality is not an easy one to answer, as these are usually seen as discrete policy areas. This fragmentation matters because, as argued above, these issues are closely interlinked and probably cannot be solved except by being addressed 'in the round', as the government itself suggested (HM Government, 2022a).

Final thoughts

The story of English economic development/industrial strategies/growth policies over the past 30 years or more is centred on the partial failure of a narrative based around a limited set of supply-side interventions, which have ignored the reality of an economy and labour market where large swathes of activity have relatively little need for cutting-edge R&D or skilled labour, and even less managerial ability to deploy these when they are supplied. It is also a story about the weak purchase and halting and delayed arrival of a science-led, knowledge-driven economy, which it was assumed would lead to the dwindling of lower-skilled and lower-paid occupations as everyone became a knowledge worker. Policy across successive Conservative and Labour administrations has been founded on what are at best partial truths and overoptimistic assumptions.

Given the scale and depth of the crisis we now face, we urgently need to discard this thinking. Policy needs to change and broaden to address the economy and labour market we have, not the one we might dream of having. This means confronting productivity problems in everyday sectors and everyday jobs. Without action and new thinking, the danger is that we will face a future marked by policy atrophy and a spiral of diminishing expectations and returns.

Actors across the political spectrum need to reflect on the possibilities of a new focus for economic and industrial policy. It is now incumbent on all who want to see a wider suite of industrial policies to start to flesh out how this approach can be developed and delivered.

References

ap Gwilym, R. (2019) *What is the 'foundational economy'?* Cardiff: Institute of Welsh Affairs.

Ahrend, R. and Schumann, A. (2014) Approaches to metropolitan area governance: A country overview. *OECD Regional Development Working Papers*. 2014/03. Paris: OECD.

Alway, P., Cooper, L., Day, N. and Morgan, L. (2022) *Going further and higher*. London: Independent Commission on the College of the Future/Sheffield: Civic University Network.

Atkinson, C., Lupton, B., Kynigho, A., Antcliff, V. and Carter, J. (2017) *People skills*. *Building ambition and HR capability in small UK firms*. London: Chartered Institute of Personnel and Development.

Atkinson, C., Lupton, B. and Crowley, L. (2019) *Productivity and place: Recommendations for policy and practice*. London: Chartered Institute of Personnel and Development.

Bartik, T. (2018) What works to help manufacturing-intensive local economies? *Upjohn Institute Technical Report No. 18-035*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Be the Business. (2021) *Productive business index, edition three, Q3 2021*. London: Be the Business.

BEIS. (2021) *UK innovation strategy: Leading the future by creating it*. London: Department for Business, Energy and Industrial Strategy.

Bentham, J., Bowman, A., de la Cuesta, M., Engelen, E., Ertürk, I., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M. and Williams, K. (2013) Manifesto for the foundational economy. *CRESC Working Paper*. No 131. Manchester: Manchester University.

Blair, A., Hague, W., Kakkad, J., Macon-Cooney, B., Northend, J., Phillips, J., Rajkumar, N., Stanley, L. and Westgarth, T. (2023) *A new national purpose: Innovation can power the future of Britain*. London: Tony Blair Institute for Global Change.

Bloom, N., Genakos, C., Sadun, R. and Van Reenen, J. (2012) Management practices across firms and countries. *Academy of Management Perspectives*. Vol 26, No 1, pp12-33.

Bosworth, D. and Warhurst, C. (2022) *Does good work have a positive effect on productivity? Developing the evidence base*. Dunfermline: Carnegie UK.

Brandily, P., Distefano, M., Donnat, H., Feld, I., Overmann, H. and Shah, K. (2022) Bridging the gap: What would it take to narrow the UK's productivity disparities? London: The Resolution Foundation. Brown, A., Gregory, J. and Wunsch-Vincent, S. (2022) Intangible assets owned by all listed companies grew to USD 74 trillion in 2021 - the US and China have the most intangible asset-intensive firms in, respectively, high and middle-income countries. Geneva: World Intellectual Property Organization.

Burnett, M. and Priestly, M. (2022) *Rocket science: How can the UK become a science superpower?* London: Onward UK.

Business Wales. (2022) Foundational economy. Cardiff: Business Wales.

Capgemini Research Institute. (2022) Inside the mind of a Nobel Prize laureate: Sir Christopher Pissarides. *Quarterly Review*. No 6, pp1-14.

CIPD. (2020) *Revamping labour market enforcement in the UK*. London: Chartered Institute of Personnel and Development.

CIPD. (2021) Unlocking business improvement: Overcoming obstacles to workplace productivity growth. London: Chartered Institute of Personnel and Development.

CIPD. (2022) What is the scale and impact of graduate overqualification in the UK? London: Chartered Institute of Personnel and Development.

Cohen, W. and Levinthal, D. (1990) Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*. Vol 35, No 1, pp128-152.

Coyle, D., Flanders, S., Glaeser, E., Muzzucato, M., Overman, H. and Singh, D. (2019) *Education and skills research summary*. Manchester: Greater Manchester Independent Prosperity Review

Crouch, C., Finegold, D. and Sako, M. (1999) Are skills the answer? The political economy of skills creation in advanced industrial countries. Oxford: Oxford University Press.

Cruddas, J. (2021) The dignity of labour. Cambridge: Polity Press.

DfE. (2021) Skills for jobs: Lifelong learning for opportunities and growth. London: Department for Education.

Di Giacomo, G. and Lerch, B. (2022) The importance of human capital in an era of automation. London: London School of Economics.

Driffield, N., Du, J., Godsell, J, Hart, M., Lavoratori, K., Roper, S., Surdu, I. and Zhang, W. (2021) Understanding productivity: Organisational capital perspectives. *Productivity Institute Working Paper*. No 013. Manchester: The Productivity Institute.

Elliott, L. (2023) Atom Valley: Andy Burnham's vision for a regenerated Manchester. *The Observer*. 7 January (online edition).

Enekel, K. (2020) *How will more R&D spending level up the UK*? Blog post, 14 September. London: Centre for Cities.

Fair Work Commission. (2019) Fair work Wales. Cardiff: Welsh Government.

Fanning, T. and Marlow, D. (2022) *Is the road to levelling up paved with anything more than good intentions?* Blog post, 22 November. London: Wonkhe.

Finegold, D. (1999) Creating self-sustaining high-skill ecosystems. Oxford Review of Economic Policy. Vol 15, No 1, pp60-81.

Forth, J. and Rincon Aznar, A. (2018) *Productivity in the UK's low-wage industries: A comparative cross-country analysis*. York: Joseph Rowntree Foundation.

Froy, F. (2013) Global policy developments towards industrial policy and skills: Skills for competitiveness and growth. *Oxford Review of Economic Policy*. Vol 29, No 2, pp344-360.

Goodwin, T., Bettany, V., Swiatkowski, P. and Longlands, S. (2022) *A light in the dark: Progressive frontiers in local economics*. Manchester: Centre for Local Economic Strategies.

Green, A., Sissons, P., Qamar, A. and Broughton, K. (2018) *Raising productivity in low-wage sectors and reducing poverty*. York: Joseph Rowntree Foundation.

Griffith, R., Redding, S. and Van Reenen, J. (2003) R&D and absorptive capacity: Theory and empirical evidence. *Scandinavian Journal of Economics*. Vol 105, No 1, pp99-118.

Grimshaw, D. and Miozza, M. (2021) Human capital and productivity: A call for new interdisciplinary research. *Productivity Institute Working Paper*. No 006. Manchester: The Productivity Institute.

Haldane, A. (2018) *The UK's productivity problem: Hub no spokes*. Academy of Social Sciences Annual Lecture. 28 June. London: Bank of England.

Harris, L., Tuckman, A., Watling, D. and Downes, B. (2011) Unlocking engagement: A review of the 'Innovative Workplaces' initiative. London: Acas.

Henley, A. (2022) Is there a link between small business leadership and productivity? *State of the Art Review*. No 55. Manchester: The Productivity Institute.

Heseltine, M. (2012) No stone unturned: In pursuit of growth. London: DBIS.

HM Government. (2022a) Levelling up the United Kingdom. London: HMSO.

HM Government. (2022b) A plan for growth. London: HMSO.

Hodgson, A. and Spours, K. (2013) An ecological analysis of the dynamics of localities: A 14+ low opportunity progression equilibrium in action. *Journal of Education and Work*. Vol 28, No 1, pp24-43.

House of Commons Treasury Committee. (2022) *Jobs, growth and productivity after coronavirus: Fourth report of session* 2022-23. London: House of Commons.

House of Lords Science and Technology Committee. (2022) 'Science and technology superpower': More than a slogan? London: Palace of Westminster.

Hoynes, H., Joyce, R. and Waters, T. (2022) *Benefits and tax credits*. London: Institute for Fiscal Studies.

Høyrup, S., Bonnafous-Boucher, M., Hasse, C., Lotz, M. and Møller, K. (eds) (2012) *Employee-driven innovation: A new approach*. Basingstoke: Palgrave Macmillan.

Hulten, C. (2001) Total factor productivity: A short biography. In Hulton, C., Dean, E. and Harper, M. (eds) *New developments in productivity analysis*. Chicago: Chicago University Press.

Hunt, J. (2023) *Chancellor Jeremy Hunt's speech at Bloomberg*. 27 January. London: HM Treasury

Industrial Strategy Council. (2021) Industrial Strategy Council annual report. London: ISC.

Institute for the Future of Work. (2021) The good work monitor. London: IFOW.

Jensen, M., Johnson, B., Lorenz, E. and Lundvall, B. (2007) Forms of knowledge and modes of innovation. *Research Policy*. Vol 36, No 5, pp680-693.

Jones, R. (2022) Science and innovation policy for hard times: an overview of the UK's research and development landscape. *Productivity Insights Paper*. No 014. Manchester: The Productivity Institute.

Jong, D., Tsvetkova, A., Lembcke, A. and Ahrend, R. (2021) A comprehensive approach to understanding urban productivity effects of local governments: local autonomy, government quality and fragmentation. *OECD Regional Development Papers*. No 11. Paris: OECD.

Judge, L. and Tomlinson, D. (2022) All over the place. Perspectives on local economic prosperity. *The Economy 2030 Inquiry Paper*. London: Resolution Foundation.

Keep, E. (2002) The English VET policy debate - fragile 'technologies' or opening the 'black box': Two competing visions of where we go next. *Journal of Education and Work*. Vol 15, No 4, pp457-479.

Keep, E. (2013) Opening the 'black box' - the increasing importance of a public policy focus on what happens in the workplace. *Skills in Focus*. Glasgow: Skills Development Scotland.

Keep, E. (2016) Improving skills utilisation in the UK - some reflections on what, who and how? *SKOPE Research Paper*. No 123. Oxford: SKOPE.

Keep, E. (2020) Employers, the ghost at the feast. *Journal of Education and Work*. Vol 33, Nos 7-8, pp500-507.

Keep, E. (2022) What is the role of skills and the skills system in promoting growth in areas of the country that are poorer performing? *Skills and Productivity Board Research Paper*. London: DfE.

Keep, E., Lloyd, C., and Payne, J. (2010) 'Skills Policy and the Displacement of Industrial Relations: The Elephant in the Corner?', in T. Colling and M. Terry (eds.), *Industrial Relations Theory and Practice*, 3rd edition, Chichester: Wiley, 398-421.

Keep, E. and Mayhew, K. (2014) *Industrial strategy and the future of skills policy: The high road to sustainable growth*. London: Chartered Institute of Personnel and Development.

Keep, E., Mayhew, K. and Payne, J. (2006) From skills revolution to productivity miracle: Not as easy as it sounds? *Oxford Review of Economic Policy*. Vol 22, No 4, pp539-559.

Labour Party. (2022) *Prosperity through partnership: Labour's industrial strategy*. London: Labour Party.

Labour Party's Commission on the UK's Future. (2022) A new Britain: Renewing our democracy and rebuilding our economy. London: The Labour Party.

Lee, N. and Clarke, S. (2017) A rising tide lifts all boats? Advanced industries and their impact on living standards. London: Resolution Foundation.

Lloyd Goodwin, T. and Millthorne, L. (2023) *Why Manchester needs more than trickle down economics*. Blog post, 15 February. Manchester: CLES.

Lloyd, C., Mason, G., and Mayhew, K. (eds.)(2008) *Low-Wage Work in the United Kingdom*, New York: Russell Sage Foundation.

Lundvall, B-A. (1992) National systems of innovation: Towards a theory of innovation and interactive learning. London: Pinter Publishers.

Lundvall, B-A., Rasmussen, P. and Lorenz, P. (2008) Education in the learning economy: A European perspective. *Policy Futures in Education*. Vol 6, No 6, pp681-700.

Lyons, H., Taylor, A. and Green, A. (2020) *Rising to the UK's skills challenges*. Industrial Strategy Council Research Paper. London: ISC.

Marmot, M. (2020) *Health equity in England: The Marmot Review 10 years on*. London: Institute of Health Equity.

McCann, P. (2020) Productivity perspectives. Sheffield: Productivity Insights Network.

Miller-Adams, M., Hershbein, B., Bartik, T., Timmeney, B., Meyers, A. and Adams, L. (2019) *Building shared prosperity: How communities can create good jobs for all.* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Nelles, J., Verinder, B., Walsh, K., and Vorley, T. (2023) Skills, innovation and productivity: The role of further education colleges in local and regional ecosystems. Manchester: Productivity Institute/Oxford: Innovation Caucus.

Nelles, J., Walsh, K. and Papazoglou. (2021) FECs, innovation and skills: A literature review. *Productivity Insights Paper*. No 012, Manchester: The Productivity Institute.

Norman, A. (2020) A gear change for growth. London: Centre for Progressive Policy.

Norris, E. and Adam, R. (2017) All change - Why Britain is so prone to policy reinvention and what can be done about it. London: Institute for Government.

O'Donovan, N. (2022) Pursuing the knowledge economy: A sympathetic history of highskill, high-wage hubris. Newcastle upon Tyne: Agenda Publishing.

Office for Budget Responsibility. (2022) *Economic and fiscal outlook - November 2022*. London: OBR.

OECD. (2011) A new OECD project - new sources of growth: intangible assets. Paris: Organisation for Economic Cooperation and Development.

Oliveira-Cunha, J., Kozler, J., Shah, P., Thwaites, G., and Valero, A. (2021) *Business Time: How Ready are UK Firms for the Decisive Decade?*, The Economy 2030 Inquiry, London: Resolution Foundation.

Pabst, A. (2021) Re-thinking regional regeneration. *National Institute Economic Review*. No 258, pp1-8.

Pabst, A. (2023) Back to the future: How Hunt's embrace of technology risks repeating Blair's folly. *The Critic*. 31 January.

Papaganniaki, E., Clarke, J., Thomas, A. and Atwell, S. (2022) *The good work time series*. London: IFOW.

Papaganniaki, E., Skordis, J., Clarke, J. and Brewin, K. (2023) *The good work time series*. London: IFOW.

Payne, J. (2011) Scotland's Skill Utilisation Programme: An interim evaluation. *SKOPE Research Paper*. No 101. Cardiff: SKOPE.

Payne, J. (2018) LE(a)P in the dark? Devolution, local skills strategies and inclusive growth in England. *Journal of Education and Work*. Vol 31, Nos 5-6, pp489-502.

Phipps. J., Fuller, R. and Cuello, H. (2021) *Experimental innovation policy for SMEs: Findings and recommendations. Final findings report.* Brussels: European Commission.

Productivity Commission. (2022) *Productivity in the UK: Evidence review. First report of the Productivity Commission*. London: National Institute of Economic and Social Research.

Ramstad, E. (2009a) Promoting performance and the quality of working life simultaneously. *International Journal of Productivity and Performance Management*. Vol 58, No 5, pp423-436.

Ramstad, E. (2009b) Expanding innovation systems and policy: An organisational perspective. *Policy Studies*. Vol 30, No 5, pp533-553.

Reeves, R. (2018) The everyday economy. London: Labour Party.

Reeves, R., Tomaney, J. and Williams, K. (2019) *The everyday economy: Why it matters and how to rebuild it*. Blog post, 8 April. London: LSE.

Resolution Foundation/Centre for Economic Performance. (2022) *Stagnation nation: The interim report of the Economy 2030 Inquiry*. London: Resolution Foundation.

Rice, A., and Venables, J. 2022. 'Tradability, Productivity and Regional Disparities: theory and UK evidence', *Productivity Institute Working Paper* No. 021, Manchester: Manchester University, Productivity Institute.

Richards, D., Warner, S., Smith, M. and Coyle, D. (2022) Crisis and state transformation: COVID-19, levelling up and the UK's incoherent state. *Cambridge Journal of Regional Economics and Society*. Vol 16, No 1, pp31-48.

Rodrik, D. (2022) *An industrial policy for good jobs*. The Hamilton Project. Cambridge: Harvard University, J.F. Kennedy School of Government.

Rodrik, D. and Sabel, C. (2019) *Building a good jobs economy*. Cambridge: Harvard University, J.F. Kennedy School of Government.

Romaniuk, A., Osborne, C., Rainsford, E. and Taylor, A. (2020) *Understanding the policy-making processes behind local growth strategies in England*. Industrial Strategy Council Research Paper. London: ISC.

Roubini, N. (2023) Davos elites need to wake up to the 'megathreats' the world is facing. *The Guardian*. 19 January.

Roulstone, A., Gradwell, L., Price, J. and Child, L. (2003) *How disabled people are managed in the workplace*. York: Joseph Rowntree Foundation.

Royal Society. (2022) *Regional absorptive capacity: The skills dimension*. London: Royal Society.

Schafan, A., Noah Smith, M. and Hall, S. (2020) *The spatial contract*. Manchester: Manchester University Press.

Scottish Government. (2022a) *National strategy for economic transformation*. Edinburgh: Scottish Government.

Scottish Government. (2022b) Fair Work action plan: Becoming a leading Fair Work nation by 2025. Edinburgh: Scottish Government.

Seaford, C., Glover, B., Collinson, S., Hoole, C., Kitsos, A., Gutierrez Posada, D., Tilley, H., Mukherjee, A., Gilbert, N., Newman, J. and Driffield, N. (2020) *Achieving levelling-up: The structures and processes needed*. Guildford: LIPSIT.

Senedd. (2022) Fair work and better public services? The Social Partnership and Public Procurement Bill. Cardiff: Welsh Government.

Sissons, P. (2020) The low skills equilibrium: moving from concept to policy utility. *Urban Studies*. Vol 58, No 8, pp1543-1560.

Stone, E. (2011) *International approaches to high performance work organisation*. UKCES Evidence Report 37. Rotherham: UK Commission for Employment and Skills.

Sunak, R. (2023) *PM speech on building a better future*. 4 January. London: Prime Minister's Office.

Taylor, M., Marsh, G., Nicol, D. and Broadbent, P. (2017) *Good work: The Taylor review of modern working practices*. London: HM Government.

Thompson, S., Colebrook, C., Hatfield, I. and Doyle, P. (2016) *Boosting Britain's low-wage* sectors: A strategy for productivity, innovation and growth. London: IPPR.

Tily, G. (2018) *UK third bottom of the global investment league*. Blog post, 9 September. London: Trades Union Congress.

Totterdill, P. (2019) Innovative workplaces: Enhancing skills utilisation through workplace innovation. A case study for the OECD. Nottingham: UK Work Organisation Network.

Warhurst, C., and Wright, S. (2015) 'If It's Innovation You Want, Think About Job Quality', in BBVA/OpenMind (eds.) *Reinventing the Company in the Digital Age*. Available at: <u>https://www.bbvaopenmind.com/wp-content/uploads/2015/02/BBVA-OpenMInd-If-It-is-Innovation-You-Want-Think-About-Job-Quality-business-innov</u>

Wessner, C.H., and Howell, T.R. (2017) 'Smart Specialization in the US Context; Lessons from the Growth of the Albany, New York Nanotechnology Cluster', in S. Radosevic, A. Curaj, R. Gheorghiu, L. Andreescu, and I. Wade (eds.), *Advances in the Theory and Practice of Smart Specialization*, London: Elsevier (Academic Press), 158-181.

Westwood, A., Sensier, M. and Pike, N. (2021) Levelling up, local growth and productivity in England. *Productivity Insights Paper*. No 005. Manchester: Productivity Institute.

Wilkes, G. (2021) *Productivity: firing on all cylinders - Why restoring growth is a matter for all sectors*, London: Institute for Government.

Willmott, B. (2021) What the UK needs for Christmas is a coherent productivity strategy. *CIPD Voice*. No 32.

Wilson, R. and Hogarth, T. (eds) (2003) *Tackling the low skills equilibrium*. London: Department for Trade and Industry.

Wilson, R., Barnes, S-A., May-Gillings, M., Patel, S. and Bui, H. (2020) Working Futures 2017-2027: Long-run labour market and skills projections for the UK. Main report. London: DfE.

Wilson, R., Bosworth, D., Bosworth, L., Cardenas-Rubio, J., Day, R., Patel, S., Bui, H., Lin, X., Seymour, D. and Thoung, C. (2022) *The Skills Imperative 2035: Occupational outlook: Long-run employment prospects in the UK, baseline projections.* Headline report. Slough: National Foundation for Educational Research.

Wright, J. and Corney, M. (eds.) (2023) *Driving-up employer investment in skills: Pressing the right buttons*. London: Campaign for Learning.

Yates, E., Clark, I. and Rossiter, W. (2021) Local economic governance strategies in the UK's post-industrial cities and the challenges of improving local work and employment conditions. *Local Economy*. Vol 36, No 2, pp115-132.

Yeandle, S., Crompton, R., Wigfield, A. and Dennett, J. (2002) *Employers, communities and family-friendly employment policies*. York: Joseph Rowntree Foundation.

Zymek, R. and Jones, B. (2020) *UK regional productivity differences: An evidence review*. Industrial Strategy Council Research Paper. London: ISC.



The Chartered Institute of Personnel and Development 151 The Broadway London SW19 1JQ United Kingdom T + 44 (0)20 8612 6200 F + 44 (0)20 8612 6201E cipd@cipd.co.uk W cipd.org

Incorporated by Royal Charter Registered as a charity in England and Wales (1079797) and Scotland (SC045154).

Issued: June 2023 Reference: 8421 © CIPD 2023